L.E. Fletcher Technical Community College MATH 2010

Course Title and Description: Math 2010 - Calculus with Business and Economic Applications (3-0-3)

Prerequisite: Completion of MATH 1100, permission of department head. Functions, intuitive limits, derivatives, applications of derivatives and mathematics of finance. Graphing calculator required (recommended calculators include, but are not limited to TI 83 or TI 84).

Course Text: Mathematics with Applications 8th edition by Lial and Hungerford

Student Outcomes: Upon completion of this course, the students will be able to:

- A. Find the limit(s) of a function.
- B. Find the derivative of a function.
- C. Apply and interpret the derivative.
- D. Determine continuity.
- E. Find simple and compound interest.
- F. Find the present value of a loan.
- G. Find annuities.
- H. Amortize a loan.

Course Topics:

Chapter 3 Functions and graphs

Chapter 4 Exponential and logarithmic functions

Chapter 11 Differential Calculus

Chapter 12 Applications of Derivative

Chapter 5 Mathematics of finance

Note: Chapters 3 and 4 are review and will be covered quickly.

Other topics can be added if time allows.

Method of Evaluation: Students will be evaluated on the following basis:

Total	600 pts.
Participation grade	100 pts.
1 cumulative exam	100 pts.
4 chapter exams (100pts. Each)	400 pts.

90-100 A 80 - 89 B 70 - 79 C 60 - 69 D <60 F

Makeup Policy: Students will be allowed a makeup exam only if proper documentation is provided to the instructor immediately upon the student's return to class. **All makeup exams will be administered on the final day of the semester.** Class participation points are not available for makeup work. *It is the student's responsibility to makeup any class work or assignments given in his/her absence.*

Attendance: Students are expected to attend all classes. If an absence occurs, it is the responsibility of the student to make up all work missed. Any student who accumulates excessive absences (**6 classes for MWF**) may be dropped from the class with an "F" in the course. Students who miss more than 5 classes will be encouraged to drop the course with a "W" in order to avoid receiving the "F".

Students arriving after the role has been called will be recorded as absent. <u>ALL</u> absences count toward the total of 6. Reasons for the absence will not change the total allowed.

Course Transferability: General education courses that are listed on the Louisiana Board of Regents' Statewide Student Transfer Guide and Articulation Matrix are transferable to other public four-year universities and two-year colleges in Louisiana. This publication is available at the Board of Regent's website at www.regents.state.la.us. Courses taught by instructors holding a master's degree may be transferable. Students should check with the receiving institution concerning these courses.

Students with Disabilities: FTCC adheres to Title I and Title II of the Americans with Disabilities Act, and the campus will make reasonable alterations in facilities, services, policies, and practices in order that qualified individuals with disabilities may have access to both employment and training. Students should contact the Office of Student Affairs (Mr. Bilello) to request these services.

Blackboard Accounts:

A blackboard account has been created for you.

To access this account you will need to use a computer that can access the internet. If you do not have internet access at home, you can use a computer in the public library, school library, or in the tutoring lab.

First go to www.lefletcher.edu.

Scroll down the right side of the web site until you reach the link to "Blackboard".

Left click on the work "Blackboard". A new web page comes up after this (http://lctcs.blackboard.com).

On the new web page click on the icon labeled "Login". This takes you to http://lctcs.blackboard.com/webapps/login

Here you will enter the user ID and password described below.

User ID: There are four parts to your user ID

Part one: the lowercase letters le

Part two: the first letter of your first name

Part three: your last name

Part four: the last two digits of your social security number

Password: Initially your password is identical to your user ID.

It is quite possible that in your Blackboard account you will be enrolled in more than one class. If you click on the course name, a new screen emerges with options on the left side.

Student Conduct and Responsibilities:

Students are expected to conduct themselves at all times in a manner acceptable to standards prescribed by society and the school.

An essential rule in every class at FTCC is that all work for which a student will receive a grade or credit be entirely his/her own or be properly documented to indicate sources. When a student does not follow this rule, he/she is dishonest and undermines the goals of the college. Cheating in any form, therefore, cannot be tolerated; and responsibility rests with the student to know the acceptable methods and techniques for proper documentation of sources and to avoid cheating and/or plagiarism in all work submitted for credit, whether prepared in or out of

class. A student established to have cheated will be given an "F" on the exam for a first offense; he/she will receive an "F" in the course for a second offense.

Note: Drinking or eating in class is prohibited with the exception of water in a closed container. Electronic devices of any type, i.e. cell phone, pda's, beepers, etc., may not be used in the classroom and should be switched off upon entering the room. Do not answer your phone.

Test 1: Chapter 3, Chapter 4

Test 2: Chapter 11 Test 3: Chapter 12 Test 4: Chapter 5